## Title Richmond River Floodplain Prioritisation Study **Abstract** The Coastal Floodplain Prioritisation Study covered seven estuaries on the NSW floodplain. The study included an extensive data collection and collation process to improve understanding of the processes and areas that contribute to poor water quality and improve overall floodplain management. The data delivered here includes information on floodplain drainage infrastructure, soil stratigraphy and hydraulic conductivity, sea level rise vulnerability and drain cross sections. The final outcomes of the prioritisation for the Richmond River floodplain with respect to acid and blackwater generation is also provided. Resource locator Richmond River Name: Richmond River Floodplain Prioritisation Study Data Quality Statement **Floodplain** Protocol: WWW:DOWNLOAD-1.0-http--download **Prioritisation** Study Data Description: Quality Data Quality Statement for the Richmond River Floodplain Prioritisation Study Statement Function: download Name: Richmond River Floodplain Prioritisation Study Richmond River **Floodplain** Protocol: WWW:DOWNLOAD-1.0-http--download Prioritisation Study Description: File contains: .shp, .mxd, .mpk, .pdf Function: download Unique resource identifier 53cc1d21-336a-4bee-94ca-1784f1a32336 Code Presentation Map digital form Dataset **English** language Metadata standard Name ISO 19115 Edition 2016 Dataset URI https://datasets.seed.nsw.gov.au/dataset/53cc1d21-336a-4bee-94ca-1784f1a32336 The aims of the study were to develop and apply multi-criteria prioritisation Purpose methodologies to rank drainage subcatchments within NSW coastal floodplains by their contribution to acid and blackwater generation and discharge, to determine the subsequent risks to the estuarine waterways, and to guide the future management of coastal floodplains. The purpose of this prioritisation is to establish an evidence-based list of high priority subcatchments to be targeted for on-ground management actions or remediation. The Richmond River Floodplain Prioritisation Study was the application of the method on the Richmond River. Status Completed Spatial representation vector Type Spatial reference system

Code

identifying the spatial reference system	4283	
Topic category		
Keyword set		
keyword value		ECOLOGY-Landscape
		BIOPHYSICAL
		SOIL-Chemistry
		HAZARDS
		WATER
		WATER-Hydrochemistry
		WATER-Hydrology
		WATER-Surface
		MARINE
		MARINE-Estuaries
		MARINE-Human-Impacts
		CLIMATE-AND-WEATHER-Extreme-weather-events
		HAZARDS-Flood  HAZARDS-Severe-local-storms
		GEOSCIENCES-Hydrogeology
		WATER-Quality
		MARINE-Coasts
		CLIMATE-AND-WEATHER-Climate-change
		HUMAN-ENVIRONMENT-Planning
Originating control	led vocabulary	
Title		ANZLIC Search Words
Reference date		2008-05-16
Geographic loc	ation	
West bounding lon	gitude	153.05829
East bounding long	gitude	153.60422
North bounding lat	itude	-29.16486
South bounding la	titude	-28.71774
Vertical extent	information	
Minimum value		-100
Maximum value		2228
Coordinate referen	ce system	
Authority code		urn:ogc:def:cs:EPSG::
Code identifying t system	he coordinate reference	5711

Temporal extent				
Begin position				
End position	N/A			
Dataset reference date				
Resource maintenance				
Maintenance and update frequency	Not planned			
Contact info				
Contact position	Data Broker			
Organisation name	Department of Primary Industries and Regional Development (DPIRD)			
Responsible party role	pointOfContact			

## Lineage

Harrison, A. J., Rayner, D. S., Tucker, T. A., Lumiatti, G., Rahman, P. F., Gilbert, D. & Glamore, W. 2023. Richmond River Floodplain Prioritisation Study WRL TR2020/05. Water Research Laboratory, University of New South Wales. Rayner, D. S., Harrison, A. J., Tucker, T. A., Lumiatti, G., Rahman, P. F., Waddington, K., Juma, D. & Glamore, W. 2023. Coastal Floodplain Prioritisation Study – Background and Methodology WRL TR2020/32. Water Research Laboratory, University of New South Wales.

Parent data sources include: Geoscience Australia 5 m DEM derived from lidar DPIE. 2020. eSpade NSW Soil and Land Informatin [Online]. Available:

https://www.environment.nsw.gov.au/eSpade2WebApp [Accessed 2019]. DPIE. 2020. eSpade NSW Soil and Land Informatin [Online]. Available:

https://www.environment.nsw.gov.au/eSpade2WebApp [Accessed 2019]. Lin, C., Wood, M., Haskins, P., Ryffel, T. & Lin, J. 2004. Controls on water acidification and de-oxygenation in an estuarine waterway, eastern Australia. Estuarine, Coastal and Shelf Science, 61, 55-63. Maher, C. A. 2013. Examining geochemical processes in acid sulphate soils using stable sulphur isotopes. Sammut, J., White, I. & Melville, M. D. 1996. Acidification of an estuarine tributary in eastern Australia due to drainage of acid sulfate soils. Marine & Freshwater Research, 669-684. WRL 2019. Keith Hall Drainage Survey. WRL Letter Report LR20190313. Tucker, T. A., Rayner, D. S. & Lumiatti, G. 2021. Keith Hall Drainage Options Study. Wong, V. N., McNaughton, C. & Pearson, A. 2016. Changes in soil organic carbon fractions after remediation of a coastal floodplain soil. J Environ Manage, 168, 280-7. Hirst, P., Slavich, P., Johnston, S. & Walsh, S. 2009. Assessment of hydraulic conductivity in coastal floodplain acid sulfate soils on the north coast of NSW. Industry & Investment NSW. White, L., Melville, M. D., Wilsor, B. P., Price, C. B. & Willett, L. Understanding acid sulphate soils in canelands. Proceedings of the National Conference on Acid Sulphate Soils, 1993 Coolongatta, Queensland. CSIRO, NSW Agriculture, Tweed Shire Council, Australia, 130-148.

## Limitations on public access

## Responsible party

Contact position Data Broker

Organisation name Department of Primary Industries and Regional Development (DPIRD)

Responsible party role pointOfContact

Metadata point of contact		
Contact position	Data Broker	
Organisation name	Department of Primary Industries and Regional Development (DPIRD)	
Responsible party role	pointOfContact	
Metadata date	2023-10-31T05:36:30.021773	
Metadata language		